

<< Declaration of  
BEng major << Declaration of  
BBA major

School:		School of Engineering and School of Business Management			Student's Pathway												
Program:		Dual Degree Program (BEng in Civil Engineering and BBA in Management)															
Course Offering Dept. (course code prefix)	Course Code	Course Title / Courses List	Credits	Year 1 Fall	Year 1 Spring	Year 2 Fall	Year 2 Spring	Year 3 Fall	Year 3 Spring	Year 4 Fall	Year 4 Spring	Year 5 Fall	Year 5 Spring	Sub-total	Remarks		
<b>BEng in Civil Engineering</b>																	
<b>Major Requirements</b>																	
<b>Engineering Fundamental Courses</b>																	
COMP	1021	Note: COMP1021 OR COMP1022P OR COMP2011 OR COMP2012H	3-5														
COMP	1022P	Introduction to Computer Science	3		3									3	Students should take COMP1021 which will also be used to substitute ISOM 2010 and to waive ISOM 2020		
COMP	2011	Introduction to Computing with Java	3														
COMP	2012H	Programming with C++	4														
COMP	2012H	Honors Object-Oriented Programming and Data Structures	5														
CHEM	1020	General Chemistry I	3	3										3			
LANG	2030	Technical Communication I	3	---	---	---	---	---	---	---	---	---	---	0	Waived for DDP students		
MATH	1012	Note: ((MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)) OR (MATH 1020)	4-7														
MATH	1013	Calculus IA	4														
MATH	1014	Calculus IB	3		3									6			
MATH	1020	Calculus II	3														
MATH	1023	Accelerated Calculus	4														
MATH	1024	Honors Calculus I	3														
MATH	1024	Honors Calculus II	3														
MATH	2011	Introduction to Multivariable Calculus	3					3						3			
MATH	2350	Applied Linear Algebra and Differential Equations	3					3						3			
PHYS	1112	Note: PHYS 1112 OR PHYS 1312	3	3										3			
PHYS	1312	General Physics I with Calculus	3											3			
PHYS	1312	Honors General Physics I	3											3			
<b>Required credits for Engineering Fundamental Courses</b>				9	6	6	0	0	0	0	0	0	0	21			
<b>Major Required Courses and Electives</b>																	
CIVL	1010	Academic Professional Development I	0			0	0							0			
CIVL	1100	Discovering Civil and Environmental Engineering	3			3								3			
CIVL	2010	Academic Professional Development II	0					0	0					0			
CIVL	2020	Industrial and BIM Training	0			0*	0							0			
CIVL	2110	Statics	3			3								3			
CIVL	2120	Mechanics of Materials	3				3							3			
CIVL	2160	Modeling Systems with Uncertainties	3			3								3	This course will also be used to substitute ISOM 2500		
CIVL	2170	Infrastructure Systems Engineering and Management	3				3							3			
CIVL	2410	Environmental Assessment and Management	3				3							3			
CIVL	2510	Fluid Mechanics	3				3							3			
CIVL	2810	Construction Materials	3					3						3			
CIVL	3010	Academic Professional Development III	0							0	0			0			
CIVL	3020	Internship Training	0								0*			0			
CIVL	3210	Introduction to Construction Management	3						3					3			
CIVL	3310	Structural Analysis	3					3						3			
CIVL	3320	Reinforced Concrete Design	3						3					3			
CIVL	3510	Hydrosystems Engineering	3					3						3			
CIVL	3610	Traffic and Transportation Engineering	3						3					3			
CIVL	3730	Fundamentals of Geotechnics	3							3				3			
CIVL	3740	Geotechnical Analysis and Design	3								3			3			
CIVL	4910	Note: CIVL 4910 OR CIVL 4920 (Students taking the Research 6 Option must take CIVL 4920)	6									3	3	6			
CIVL	4920	Civil and Environmental Engineering Final Year Project	6											6			
CIVL	4950	Civil and Environmental Engineering Final Year Thesis	6											6			
CIVL	4950	Civil Engineering Capstone Design Project	3									3		3			
ENGG	2010	Engineering Seminar Series	0			0	0	0	0					0			
LANG	4033	Technical Communication II for Civil and Environmental Engineering	3									3		3			
CIVL/SENG		CIVL Electives (3 courses from the specified elective list) CIVL: Any CIVL courses at 4000-level or above except CIVL 4230 SENG: Any 3000-level or above courses offered by the Engineering School or engineering departments other than CIVL	9								3	3	3	9			
<b>Required credits for Major Requirements Courses and Electives</b>				66										66			
<b>BBA in Management</b>																	
<b>School Requirements</b>																	
ACCT	2010	Principles of Accounting I	3			3								3			
ACCT	2200	Principles of Accounting II	3						3					3			
ECON	2103	Note: ECON 2103 OR ECON 2113	3		3									3			
ECON	2113	Principles of Microeconomics	3											3			
ECON	2113	Microeconomics	3											3			
ECON	2123	Note: ECON 2123 OR ECON 3123	3					3						3			
ECON	3123	Macroeconomics	3											3			
FINA	2303	Financial Management	3											3			
ISOM	2010	Introduction to Information Systems	3	---	---	---	---	---	---	---	---	---	---	0	Substituted by COMP 1021/ 1022P/ 2011/ 2012H		
ISOM	2020	Coding for Business	1	---	---	---	---	---	---	---	---	---	---	0	Waived for DDP students if they have taken and passed COMP1021 or COMP 1029P		
ISOM	2500	Business Statistics	3	---	---	---	---	---	---	---	---	---	---	0	Substituted by CIVL 2160		
ISOM	2600	Introduction to Business Analytics	1									1		1			
ISOM	2700	Operations Management	3							3				3			
MARK	2120	Marketing Management	3				3							3			
MGMT	2010	Business Ethics and the Individual	2								2			2			
MGMT	2110	Organizational Behavior	3	3										3	MGMT 2110 is a major pre-requisite		
MGMT	2130	Business Ethics and Social Responsibility	2									2		2			
LANG	2061	Note: LANG 2061 OR 2062 OR 3060	3							3				3	Non DDP-ECON students take ONLY a 3-credit of SBM-specific English course, in which they can choose from one of the three LANG courses (LANG 2061, LANG 2062, or LANG 3060).		
LANG	2062	Professional Writing for the Workplace	3											3			
LANG	3060	Professional Speaking for the Workplace	3											3			
MATH	1003	Note: MATH 1003 OR MATH 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023	3-4														
MATH	1012	Calculus and Linear Algebra	3														
MATH	1013	Calculus IA	4														
MATH	1013	Calculus IB	3														
MATH	1020	Accelerated Calculus	4														
MATH	1023	Honors Calculus I	3														
<b>Required credits for School Requirements</b>				43-44										32			
<b>Major Requirements</b>																	
<b>Major Required Courses and Electives</b>																	
MGMT	3110	Note: MGMT 3110 OR MGMT 3120 (For students in the Consulting Option, they will use MGMT 3110 to fulfill the Option Requirements and should take MGMT 3120 to fulfill this requirement.)	4					4						4	Students in the Consulting Option must take MGMT 3120		
MGMT	3120	Human Resources Management	4											4			
MGMT	3120	Managerial Leadership	4											4			
MGMT	3130	Note: MGMT 3130 OR MGMT 3140 (Students in the Consulting Option must take MGMT 3140 to fulfill this requirement.)	4						4					4	Students in the Consulting Option must take MGMT 3140		
MGMT	3140	Judgement and Decision Making in Organizations	4											4			
MGMT	3140	Negotiation	4											4			
MGMT	4210	Note: MGMT 4210 OR MGMT 4220 (Students in the Consulting Option or in the Corporate Social Responsibility and Sustainability Option must take MGMT 4210 to fulfill this requirement.)	3-4							3				3	Students in the Consulting Option must take MGMT 4210		
MGMT	4220	Corporate Strategy	3											3	Students in the CSR Option must take MGMT 4210		
MGMT	4220	Entrepreneurship and Innovation	4											4	Students in the Consulting Option are recommended to take MGMT 4220 and a new course in Simulating Strategy to fulfill the major elective requirement		
MGMT		MGMT 3000-level or above Electives (Any 3 courses of the subject and level as specified. Courses taken as Option Required Courses may not be counted towards the elective requirement.)	9								3	3	3	9			
<b>Required credits for Major Required Courses and Electives</b>				20-21										20			
<b>Additional Requirements</b>																	
<b>Requirements for Dual Degree Program</b>																	
<b>Required Courses</b>																	
TEMG	1010	T&M Professional Activities	0	0	0	0	0	0	0	0	0	0	0	0			
TEMG	3950	T&M Case Analysis and Product Innovation	3		3									3			
TEMG	4950	T&M Corporate Consulting Project	3-5					4						4			
<b>Required credits for Additional Requirements</b>				7										7			
<b>University CORE</b>																	
CORE	C3 - C9	U CORE - Others	21						3	6	6		6	21			
CORE	C1 & C2	U CORE - English Language	6	3	3									6			
HMAW	1905	Behavioral Foundations of University Education: Habits, Mindsets, and Wellness	3	1	2									3			
<b>Sub-total for University CORE</b>				30										30			
Term load (excl. free credits)																	
				16	17	18	18	20	19	18	17	16	17				
				176##													

Notes:  
( ) indicates the reuse of the same course to fulfill more than one requirement.  
\* Courses offered in winter term  
^ Courses offered in summer term  
--- denotes the course/requirement is either waived or substituted  
## To graduate, students should complete all requirements as specified for DDP.

\*\*Remarks on course(s):

>> The content of this example is not necessarily equivalent to a complete list of graduation requirements of the program. Students should refer to the Program Catalog/UG Curriculum Handbook for updated graduation requirements. For up-to-date information on course offering and scheduling, students should check it out from respective School and Department.